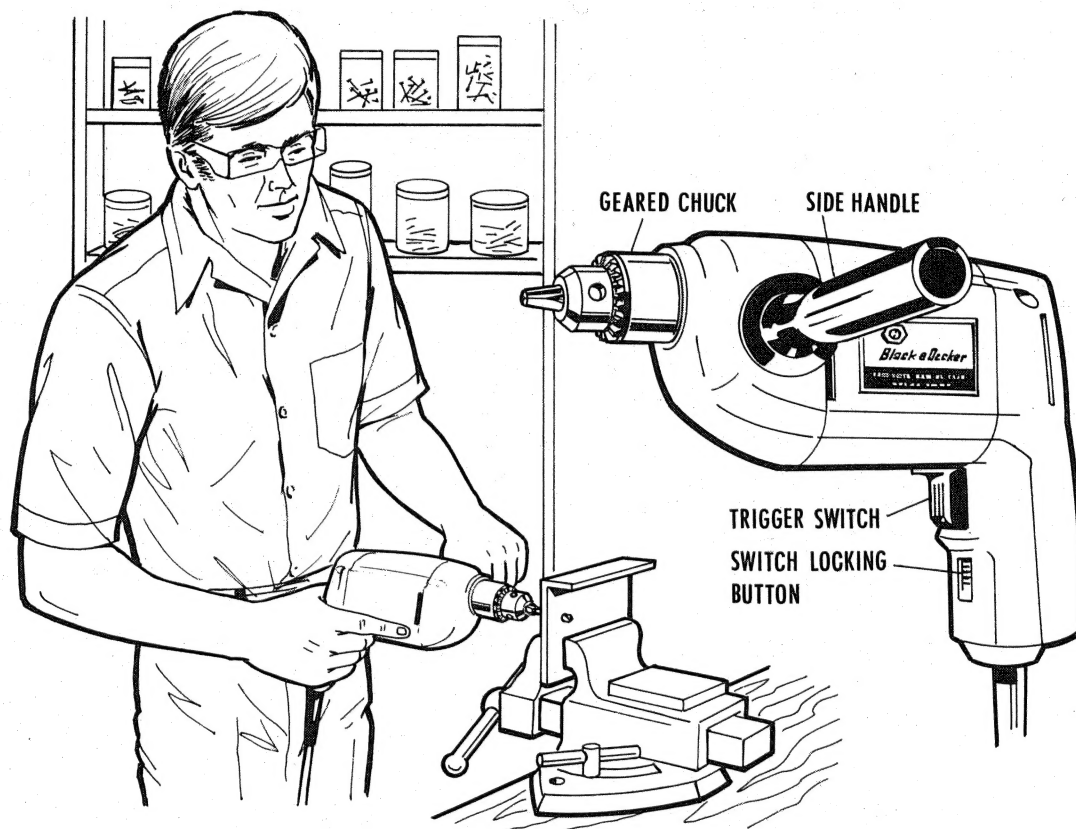




# ***Black & Decker***

## **OWNER'S MANUAL**



You can drill holes up to  $\frac{1}{2}$ " in steel,  $\frac{1}{2}$ " in masonry, and 1" in wood with this new Drill. You can use Hole Saws up to  $2\frac{1}{2}$ " in diameter for cutting holes in wood or composition boards up to  $\frac{3}{4}$ " thick. All this power and performance comes to you in a Drill with the compactness and light weight of many less powerful  $\frac{1}{4}$ " Drills.

Because of its high torque, or twisting power, it is strongly recommended that you hold the Drill with both hands whenever possible. Please read all of the safety rules and instructions carefully, and don't forget to send in your guarantee registration card.

THANK YOU for buying BLACK & DECKER!

### **1/2" DOUBLE INSULATED DRILLS**

Cat. No.	Capacity		Volts AC	Amps	Switch	R.P.M.
	Steel	Hardwood				
7204	$\frac{1}{2}$ "	1"	120	3.0	Single Speed	550
7214	$\frac{1}{2}$ "	1"	120	3.0	Variable Speed	0 to 550



## IMPORTANT INFORMATION

### SAFETY RULES FOR POWER TOOLS

The use of the Safety Seal of the Power Tool Institute assures you that this tool is produced and tested in accordance with applicable national safety standards. Operational safety, however, depends to a great extent upon the user of the tool. Please pay close attention to the following rules.

1. **KNOW YOUR POWER TOOL** — Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
2. **GROUND ALL TOOLS — UNLESS DOUBLE-INSULATED.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If adapter is used to accommodate two-prong receptacle, the adapter wire must be attached to a **known ground**. Never remove third prong.
3. **KEEP GUARDS IN PLACE** and in working order.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tool in damp or wet locations. And keep work area well lit.
6. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
7. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place — out of reach of children.
8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
9. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy duty tool.
10. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
11. **USE SAFETY GLASSES** with most tools. Also face or dust mask if cutting operation is dusty.
12. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
13. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
14. **DON'T OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS.** When not in use, before servicing; when changing accessories such as blades, bits, cutters, etc.
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
18. **AVOID ACCIDENTAL STARTING.** Don't carry plugged-in tool with finger on switch.

# IMPORTANT INFORMATION

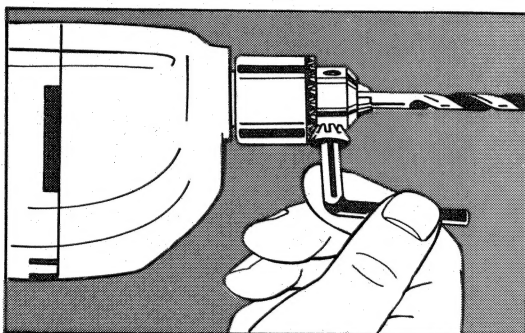
## DOUBLE INSULATION

Your Drill is DOUBLE-INSULATED to give you added safety. This means that it is constructed throughout with TWO separate "layers" of electrical insulation or one DOUBLE thickness of insulation between you and the tool's electrical system.

Tools built with this improved insulation system are not intended to be grounded. As a result, your Drill is equipped with a two-pronged plug which permits you to use any conventional 120 volt electrical outlet without concern for maintaining a ground connection.

**NOTE:** DOUBLE-INSULATION does not take the place of normal safety precautions when operating this tool. The improved insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

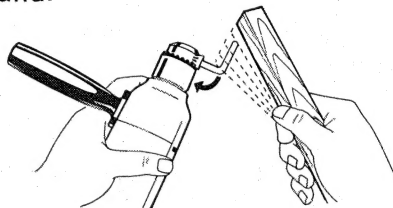
## CHUCK



To remove the chuck from the Drill, for using a threaded shank accessory or for chuck replacement, first unplug the tool. Insert the key in the chuck and tap it sharply in the direction the tool normally rotates—see at right. This will loosen the chuck shank threads and the chuck may be unscrewed by hand.

## UNPLUG DRILL.

Turn collar to open chuck jaws. Place bit in chuck so that end rests on chuck bottom. Tighten chuck collar by hand. Place chuck key in each of the three holes, and tighten in clockwise direction. It's important to tighten chuck with all three holes. To release bit, turn chuck key counterclockwise in just one hole, then loosen chuck by hand.



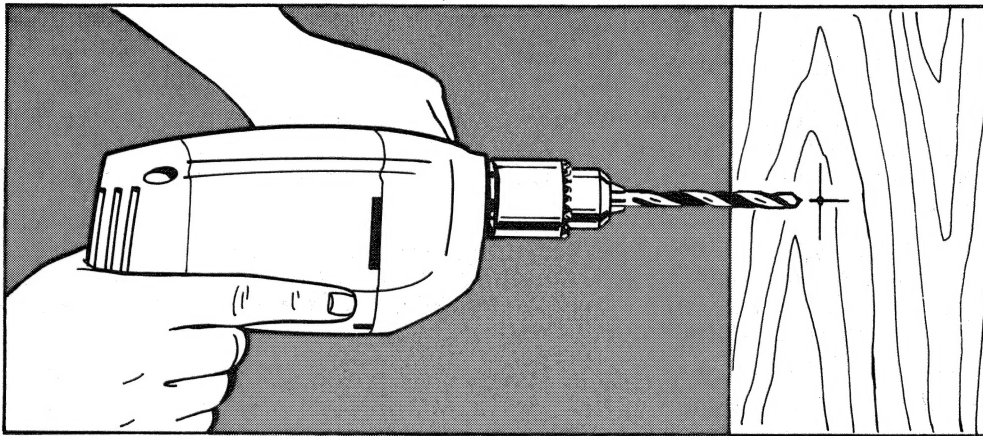
Do not lubricate the three chuck jaws or the inside of the chuck; however, a light film of oil can be applied to the outside of the chuck to prevent any rust from forming.

## EXTENSION CORD

When using this drill at a considerable distance from power source, an extension cord of adequate size must be used for safety, and to prevent loss of power and over-heating. For a 120-volt tool, the minimum size of the wires in any extension cord up to 75 feet long must be 18-gauge (American Wire Gauge). From 75 to 100 feet, 16-gauge wire is required throughout the extension. 220-volt tools require a minimum wire size of only 18-gauge in extension cord lengths up to 100 feet long. (NOTE: 16-gauge wire is heavier than 18-gauge wire and will carry current for longer distances without a voltage drop.)

Before using Extension Cords, inspect them for loose or exposed wires and damaged insulation. Make any needed repairs or replacement before using your power tool.

## OPERATION



### DRILLING

1. Always unplug the Drill when attaching or changing bits or accessories.
2. Use sharp drill bits only. For WOOD, use twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use high-speed steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits.
3. Be sure the material to be drilled is anchored or clamped firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.
4. Center-punch an indentation at the point to be drilled. This will overcome the tendency of the bit to slip around on a smooth surface. Place the tip of the bit in the indentation and turn motor "ON".
5. Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
6. Hold drill firmly with both hands, using the side handle to help control the twisting action of the drill.
7. IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL — THIS CAN DAMAGE THE DRILL.
8. To minimize stalling on breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
9. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.

### DRILLING IN METAL

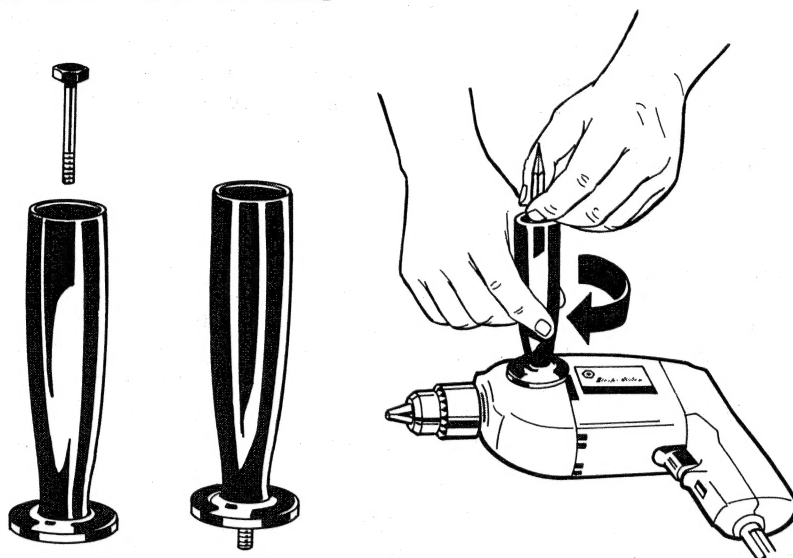
Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry. The cutting lubricants that work best are sulphurized cutting oil or lard oil; bacon grease will also serve the purpose. Aluminum is best drilled with kerosene.

### DRILLING IN WOOD

Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. For larger holes, use Power Drill Wood Bits. Work that is apt to splinter should be backed up with a block of wood.



## ATTACHING SIDE HANDLE



Drop the hexagon-head bolt into the handle and shake the handle if necessary until the bolt threads protrude at the bottom. Grasp the threads with two fingers and, pulling down, twist the bolt until it will no longer turn (there is a hexagon-shaped recess inside the handle and the bolt head should fit down into it to keep the bolt from turning).

Place the Drill on its side as shown above; and, holding the bolt down with a pencil or screwdriver, turn the handle clockwise to thread it completely and firmly into the threaded hole in the Drill.

## SWITCH

**SINGLE SPEED** ( $\frac{1}{2}$ " Drill No. 7204) To start Drill, depress trigger switch; to stop Drill, release trigger. To lock trigger in "ON" position for continuous operation, depress trigger and push up locking button (located below the trigger), then gently release trigger. To release locking mechanism, depress trigger fully, then release it. Before using the tool (each time) be sure that the lock button release mechanism is working freely.

**VARIABLE SPEED** ( $\frac{1}{2}$ " Drill No. 7214) (a) For normal operation, rotate the Variable Speed Locking Button (located in trigger) clockwise until it stops. This permits "FREE HAND" speed control — the farther the trigger is depressed, the higher the R.P.M. (b) To set the trigger switch to produce a selected speed each time it is squeezed, first rotate the button clockwise until it stops. Fully depress trigger, and with the Drill running at highest R.P.M. push up switch locking button. Release trigger and the tool will stay "ON." Now, rotate the button counterclockwise and you will notice a decrease in R.P.M. Continue rotating button until desired speed is obtained. To turn Drill "OFF," squeeze trigger and release. (c) Use lower speeds for STARTING HOLES WITHOUT A CENTER PUNCH, DRILLING IN METAL OR PLASTICS, DRIVING SCREWS, DRILLING CERAMICS. Higher speeds are better for DRILLING WOOD AND COMPOSITION BOARDS, AND FOR USING ABRASIVE AND POLISHING ACCESSORIES.

**Do not lock** the switch "ON" when drilling by hand so that you can instantly release the trigger switch if the bit binds in the hole. Be sure to release the switch locking button before disconnecting the plug from the power supply. Failure to do so will cause the tool to start immediately the next time it is plugged in. Damage or injury could result.

## ACCESSORIES

Recommended accessories for use with your Drill are listed below and in Black & Decker Home Products catalogs (CAUTION: The use of any other accessories might be hazardous). For safety in use, the following accessories should be used only in the sizes specified below:

**BITS, METAL DRILLING** — Up to 1/2" diameter.

**BITS, MASONRY DRILLING** — Up to 1/2".

**BITS, WOOD DRILLING** — Up to 1" diameter.

**HOLE SAWS** — Up to 2 1/2" diameter.

## CLEANING & LUBRICATION

Use only mild soap and a damp cloth to clean the tool. Many household cleaners contain chemicals (frequently being changed) which could seriously damage the plastic. Also, do not use gasoline, turpentine, lacquer or paint thinner, dry cleaning fluids or similar products. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Self lubricating bearings are used in the tool and periodic relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a B&D Service Center for a thorough cleaning, inspection and lubrication of the gear case.

## IMPORTANT

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using Black & Decker replacement parts. When servicing Double-Insulated Tools, it is extremely important that ONLY IDENTICAL REPLACEMENT PARTS BE USED and that REASSEMBLY OF TOOL IS IDENTICAL TO THE ORIGINAL ASSEMBLY.

## GUARANTEE

Black & Decker guarantees, for one year from date of purchase, to correct by repair or parts replacement without charge any defect due to faulty material or workmanship. Simply return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station. Naturally, we assume no responsibility for damage caused by misuse, careless handling or where repairs have been made or attempted by others.

## RAPID EXCHANGE SERVICE

Should your tool become defective, due to faulty materials or workmanship, within 90 DAYS from date of purchase, IT WILL BE REPLACED with a new unit FREE OF CHARGE. Return it to your Dealer or any B&D Service Center with all equipment originally included in the box. Accessories and Rental Tools are excluded from this exchange service. After 90 days, your tool is covered by our one year Guarantee above.

No other guarantees, written or verbal, are authorized by us.



**THE BLACK & DECKER MFG. CO.**  
**Towson, Md. 21204, U.S.A.**



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